

PUBERTAL DEVELOPMENT IN ADOLESCENTS EXPOSED TO ORGANOCHLORINE COMPOUNDS: A CROSS- SECTIONAL SURVEY IN BRAZIL

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Background and Aims: To evaluate pubertal development in adolescents exposed to residues of organochlorine pesticides, known to act as endocrine disrupters.

Methods: We conducted a survey with a population of 100 adolescents between 12 and incomplete 20 years residents of Cidade dos Meninos, Brazil. Each participant had their pubertal assessment according to Tanner Stages, and performed by trained nurses.

Results: The mean age of adolescents was 15.5 years ($SD \pm 2.5$) in a total of 76 girls and 24 boys. The ages found for the male pubertal development were: pubarche, 12.4 years ($SD \pm 1.4$), semenarche 11 years ($SD \pm 6.10$), and penis enlarge 12.5 years ($SD \pm 1.5$). As well, the girls had the following ages for development: menarche 11.8 years ($SD \pm 1.4$), thelarche 11.1 years ($SD \pm 1.5$) pubarche and 11.1 years ($SD \pm 1.4$). The data show a typical pattern of distribution by age, being more frequent change of the structure of the genitalia observed between 12 and 13 years old. However, observed values were outliers, 10 and 15 years. It's shown up outliers higher values for the distribution of hair, with 14 and 15 years. At group of girls, the infants has two outlier values (15 and 16 years) than the appropriate default development. A similar analysis it is up to the age of thelarche, where there is a higher outlier (16 years).

Conclusion: The pattern of the sample, therefore, is adolescents reaching menarche, thelarche and pubarche at ages considered normal.